

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

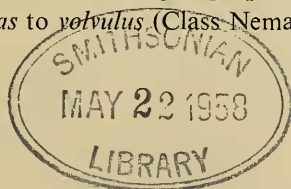
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 509

Use of the Plenary Powers to attribute the name *Filaria
volvulus* to Leuckart (K.G.F.R.), [1892], and to approve
the emendation of the foregoing specific name from
volvulus to *volvulus* (Class Nematoda)



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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 509

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(12th August 1953)

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Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, U.S.A.*)
(29th October 1954)

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October 1954)

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(6th November 1954)

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Professor Ernst MAYR (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico TORTONESE (*Museo di Storia Naturale "G. Doria", Genova, Italy*)
(16th December 1954)

OPINION 509

USE OF THE PLENARY POWERS TO ATTRIBUTE THE NAME "FILARIA VOLVULAS" TO LEUCKART (K.G.F.R.), [1892], AND TO APPROVE THE EMENDATION OF THE FOREGOING SPECIFIC NAME FROM "VOLVULAS" TO "VOLVULUS" (CLASS NEMATODA)

RULING :—(1) The following action is hereby taken under the Plenary Powers :—

(a) It is hereby directed that the binomen *Filaria volvulas* (Class Nematoda) as published by Manson (P.) in [1892] be attributed to Leuckart (K.G.F.R.).

(b) The emendation to *volvulus* of the specific name *volvulas* as published in [1892] in the combination *Filaria volvulas* and as attributed in (1) above to Leuckart (K.G.F.R.) is hereby approved.

(2) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name Number 1500 :—

volvulus (emend. of *volvulas*) Leuckart (K.G.F.R.), [1892], as published in the combination *Filaria volvulas*, the attribution of this name to Leuckart and not to Manson (P.), in a paper by whom it was published being made in accordance with a direction given under the Plenary Powers in (1) above.

(3) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid*

Specific Names in Zoology with the Name Numbers severally specified below :—

- (a) *volvulas* Leuckart (K.G.F.R.), [1892], as published in the combination *Filaria volvulas* (an Invalid Original Spelling under the Ruling given under the Plenary Powers in (1) (b) above for *volvulus* (emend. of *volvulas*) Leuckart (K.G.F.R.), [1892], as published in the combination *Filaria volvulas*) (Name No. 509) ;
- (b) the following Erroneous Subsequent Spellings for *volvulus* (emend. of *volvulas*) Leuckart (K.G.F.R.), [1892], as published in the combination *Filaria volvulas* :—
 - (i) *volvulans* Railliet, 1893, as published in the combination *Filaria volvulans* (Name No. 510) ;
 - (ii) *volvulxus* Manson (P.), 1893, as published in the combination *Filaria volvulxus* (Name No. 511).

I. THE STATEMENT OF THE CASE

On 15th November 1954 Dr. Herbert T. Dalmat (U.S. Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, Bethesda, Maryland, U.S.A.) addressed a preliminary communication to the Office of the Commission on the question of the possible use of the Commission's Plenary Powers (a) for the purpose of validating the emendation to *volvulus* of the specific name *volvulas* published by Manson in 1892 or 1893 in the combination *Filaria volvulas* and (b) for the attribution of the above name to Leuckart (K.G.F.R.). The above name was, it was explained, one of

great public health importance, for the species concerned, which was currently known as *Onchocerca volvulus* (Leuckart), was the species responsible for Human Onchocerciasis. The bibliographical and other problems involved in this case proved to be of considerable complexity and led to extensive correspondence between the Secretary and the applicant. The last of these difficulties was however cleared up on 16th December 1955, on which date Dr. Dalmat submitted the following definitive application for the consideration of the Commission :—

Proposed determination under the Plenary Powers, of the authorship of, and of the original reference for, the name “*Filaria volvulus*” (Class Nematoda) and proposed validation under the same Powers of the emendation from “*volvulus*” to “*volvulus*” of the specific name of this species

By HERBERT T. DALMAT

(Laboratory of Tropical Diseases, National Microbiological Institute, Bethesda, Maryland, U.S.A.)

I wish to present for the decision of the International Commission on Zoological Nomenclature the following case concerning the name “*Onchocerca volvulus* (Leuckart, 1893) Railliet and Henry, 1910”.

2. In the course of preparing a manuscript relative to human onchocerciasis, I was unable to find Leuckart's original description of the filarid worm causing the disease. Most texts and research papers list the species as given in the above title, neglecting to give the source in the respective bibliography. Thus, in the Appendix (: 313) of the “Bibliography of Onchocerciasis”, (*Publication No. 242 of the Pan-American Sanitary Bureau*) published in March, 1950, a reference is given for Leuckart, stating that he is quoted by Manson in an article “Skin Diseases” in Davidson's *Textbook of Hygiene and Diseases of Warm Climates* (: 963) (no date given). Fantham, Stephens, and Theobald (1916) on page 808 of *The Animal Parasites of Man* give their reference as follows : “Leuckart, R. (in Manson, P.). Diseases of the skin in tropical climates ; Davidson : Hygiene and Diseases of Warm Climates, Edinb., London, 1893, p. 963.” In the “Index Catalogue of Medical and Veterinary Zoology (Roundworms)”,

published in 1920 in *Bulletin No. 114 of the United States Public Health Service Hygienic Laboratory*, Stiles and Hassall (: 495) list this same reference as the earliest one for *volvulus*, while giving a still earlier reference (1892—see below) for the name *volvulas*, considering this to be an error for *volvulus*. J. H. Sandground in 1934, in Part 2 (: 138) of Strong, Sandground, Bequaert, and Ochoa, “Onchocerciasis with Special Reference to the Central American Form of the Disease” (*Contribution No. 6, Dept. Trop. Med. and Inst. Trop. Biol. and Med., Harvard University*) states: “Under the name of *Filaria volvulus*, Leuckart in 1893 presented a brief description of a parasite that occurred in prominent nodules under the skin of natives in the Gold Coast of Equatorial West Africa”. This would infer that Leuckart actually published a description but this is not the case. Various other authors give the reference for Leuckart’s description as “Leuckart, R., 1893, *Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten. Ein Hand und Lehrbuch für Naturforscher und Aerzte. 2 Aufl. Leipzig*”. This volume contains no discussion whatsoever of *Filaria volvulus*. Railliet and Henry, in “*Les onchocercques, nematodes parasites du tissu conjonctif*” (1910, *Compt. Rend. Soc. Biol., Paris*, 68 (No. 6) : 248—251 (250—51)) transferred the species from the genus *Filaria* Müller to *Onchocerca* Diesing, but gave no reference to the original description of the species other than the listing as “*Onchocerca volvulus* (Leuckart, 1893).—Syn. : *Filaria volvulus* Leuckart, 1893”. To settle this problem, a study of the literature was undertaken, and the following information was secured.

3. The parasite was first mentioned in the literature by Sir Patrick Manson in an article entitled: “The geographical distribution, pathological relations, and life history of *Filaria sanguinis hominis diurna* and of *Filaria sanguinis hominis perstans*, in connexion with preventive medicine”, which appears in the *Trans. 7th Internatl. Cong. Hyg. and Demog., London, August 1891*, 1 (Sect. 1) : 88. The date of this article is somewhat confused. Included on the title page is the year “1891” for the time when the Congress took place; the year “1892” is given as the date of printing and “December 1892” for the date of transmittal. In view of the importance of ascertaining the exact date of publication of Manson’s paper containing the name *Filaria volvulas*, I have made a special investigation of this subject with the help of the Library of Congress. I find that the printing of volume 1 (Section 1) of the *Trans. Int. Congr. Hyg. Demogr.* was authorised at the end of 1891, but that a fire in the printing office caused a delay with the result that work could not get started until well into 1892. Volumes 1 to 4 (which in library copies are usually bound up together) were published as separate units towards the close of 1892, while the remaining nine volumes of the Congress were not published until 1893. I find also that the numbering of the Congresses does not always correspond with the appropriate *Transactions*, since at one point there was a change in the numbering system. Thus, the Congress with which we are here concerned may be known either as the seventh

or as the ninth of the series. It has been suggested to me by the Library of Congress that the reference for *Filaria volvulus* in Manson's paper should be given as follows :—*Trans. Seventh int. Congr. Hyg. Demogr. London, August 1891* vol. 1, Section 1, p. 88, 1892. Manson's discussion of the parasite in the foregoing paper was based on information and slides sent to him by Leuckart. It cannot be ascertained from the literature whether the spelling *volvulus*, as used in this paper, was the result of a typographical error or was actually the spelling used by Leuckart or Manson.

4. The above "original description" is mentioned by Railliet in the Second Edition of his *Traité de Zoologie médicale et agricole* (: 522) published in 1893, where however he erroneously spelled the name as *Filaria volvulans*. Railliet, however, gave the date of Manson's article as "1893", rather than as "1892", the date given by Stiles and Hassall which is now seen to be correct.

5. Manson discussed this parasite again in 1893, this time in his paper entitled "Diseases of the Skin in Tropical Climates" which forms Chapter 24 (: 928—995) of the work *Hygiene and Diseases of Warm Climates* edited by Andrew Davidson. In this paper the name of this parasite appeared (: 963) as *Filaria volvulxus*. This is the reference which is usually cited for the original description of this parasite, the earlier paper in the *Trans. Seventh int. Congr. Hyg. Demogr.* being overlooked.

6. In 1896, R. Blanchard, in his "Animaux parasites", published in the *Traité de Pathologie générale* (Bouchard) (2 : 649—810 (783)), gave a short description of the worm and used the presently accepted spelling of *volvulus*. Labadie-Lagrave and Deguy offered a description of a single female, based on histological preparations, published in an article entitled "Un cas de *Filaria volvulus*", published in the *Archives de Parasitologie*, 2 (No. 3) : 451—460, 1899. The first extensive description of the adults and embryos of the parasite was given by W. T. Prout in "A filaria found in Sierra Leone. ?*Filaria volvulus* (Leuckart)" (1901, *Brit. med. J.* 1901, 1 : 209—211).

7. By common acceptance of all authors subsequent to Manson, this species has been known by the name *volvulus* and that name has been credited to Leuckart. Great and quite unnecessary confusion would result if this name were to be credited to any other author or if its spelling were to be changed. It is accordingly recommended that a Ruling be given by the Commission that this name in the combination *Filaria volvulus* be attributed to Leuckart and be treated as having been published by him in 1892 in Manson's paper on *Filaria sanguinis hominis diurna* and *Filaria sanguinis hominis perstans*, to which reference has already been made. As has already been explained, this name appeared in the paper referred to above with

the spelling "volvulas" and it is part of the present proposal that this spelling should be replaced by the currently accepted spelling "volvulus". It is recognised that under the decisions in regard to the emendation of names taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the use of the Commission's Plenary Powers will be needed in order to validate the spelling "volvulus" as the name for this species. As regards the authorship of this name, it seems likely that, although Manson obtained it from Leuckart, the manner in which it was published by Manson in the paper in question is such that under the *Règles*, it should be attributed to that author and not to Leuckart. It is suggested therefore that, when dealing with this portion of the present application, the Commission should also do so under its Plenary Powers.

8. For the reasons set forth above, the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

(a) to direct that the name *Filaria volvulas*, as published in 1892 in a paper by Manson entitled "The geographical distribution, pathological relations and life history of *Filaria sanguinis hominis diurnia* and of *Filaria sanguinis hominis perstans* in connection with preventive medicine" (*Trans. Seventh int. Congr. Hyg. Demogr.* 1 (Sect. 1) : 88) be attributed to Leuckart (K.G.F.R.) ;

(b) to approve the emendation to *volvulus* of the name *volvulas* Leuckart, [1892], as published in the combination *Filaria volvulas* ;

(2) to place the specific name *volvulus* (emend. of *volvulas*) Leuckart, [1892], as published in the combination *Filaria volvulas*, on the *Official List of Specific Names in Zoology*, with a note specifying the decisions proposed under (1) above to be taken under the Plenary Powers ;

(3) to place the undermentioned- specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

(a) *volvulas* Leuckart, [1892], as published in the combination *Filaria volvulas* (an Invalid Original Spelling for *volvulus*, under the Ruling proposed under (1)(b) above, to be given under the Plenary Powers) ;

(b) *volvulans* Railliet, 1893, as published in the combination *Filaria volvulans* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulas*) Leuckart, [1892], as published in the combination *Filaria volvulas*) ;

(c) *volvulus* Manson, 1893, as published in the combination *Filaria volvulus* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulas*) Leuckart, [1892], as published in the combination *Filaria volvulas*).

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt in 1954 of Dr. Dalmat's preliminary application the question of the attribution of the name *Filaria volvulus* (Class Nematoda) to Leuckart, [1892], was allotted the Registered Number Z.N.(S.) 877.

3. Support received prior to publication from Norman R. Stoll (Rockefeller Institute for Medical Research, New York, U.S.A.) : On 1st November 1955, prior to the publication of the present application, Dr. Norman R. Stoll (*Rockefeller Institute for Medical Research, New York, U.S.A.*) addressed the following letter to the Office of the Commission in support of the present case :—

Onchocerca volvulus being established as the correct name for this nematode of great public health importance represents one type of an almost ideal example for the International Commission to assist in maintaining a stable nomenclature. For over half a century *volvulus* has been in acceptable usage, growing in familiarity in the language of tropical medicine, and as the seriousness of *Onchocerca* infection has become realised. The confusion that would result in its being changed would serve no useful purpose. Dalmat's studies of the vicissitudes of the spelling of the species name before 1900, and his request for a Commission ruling, thus give the opportunity of forestalling for the future any such unfortunate result. His request strongly deserves support.

4. Publication of the present application : The present application was sent to the printer on 20th February 1956 and was published on 26th June of the same year in Part 3 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Dalmat, 1956, *Bull. zool. Nomencl.* **12** : 86—89).

5. Issue of Public Notices : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given

on 26th June 1956 (a) in Part 3 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Dalmat's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications.

6. No Objection Received : No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

7. Issue of Voting Paper V.P.(57)8 : On 22nd January 1957 a Voting Paper (V.P.(57)8) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the name *Filaria volvulus*, as set out in Points (1) to (3) in paragraph 8 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

8. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd April 1957.

9. Particulars of the Voting on Voting Paper V.P.(57)8 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)8 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received) :*

Hering ; Boschma ; Holthuis ; Prantl ; Lemche ; Mayr ;
Dymond ; Bodenheimer ; Vokes ; Riley ; Esaki ; Key ;

Hemming ; Bonnet ; Mertens ; Stoll ; Cabrera ;
do Amaral ; Kühnelt ; Jaczewski ; Tortonese ;
Sylvester-Bradley ; Miller ;

(b) *Negative Votes :*

None ;

(c) *Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1) :*

Hankó ;

(d) *On Leave of Absence, one (1) :*

Bradley (J.C.) ;

(e) *Voting Papers not returned :*

None.

10. Declaration of Result of Vote : On 24th April 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)8, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

11. Preparation of the Ruling given in the present " Opinion " : On 1st January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)8.

12. Original References : The following are the original references for the specific names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* respectively for the names of taxa belonging to the species category :—

volvulans, *Filaria*, Railliet (A.), 1893, *Traité Zool. méd. agricole* (ed. 2) : 522

volvulas, *Filaria*, Leuckart (K.G.F.R.), [1892], as published in the combination *Filaria volvulas* (an Invalid Original Spelling for *volvulus* (emend. of *volvulas*) Leuckart, [1892], as published in the combination *Filaria volvulas*)

volvulus (emend. of *volvulas*) Leuckart (K.G.F.R.), [1892], in Manson (P.), *Trans. Seventh [9th] int. Congr. Hyg. Demogr.* (London 1891) 1 (Sect. 1) : 88

volvulus, *Filaria*, Manson (P.), 1893, in Davidson (A.), *Hygiene Disease warm Climates* : 963

13. Compliance with Prescribed Procedures : The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

14. “ Opinion ” Number : The present *Opinion* shall be known as *Opinion* Five Hundred and Nine (509) of the International Commission on Zoological Nomenclature.

DONE in London, this First day of January, Nineteen Hundred and Fifty-Eight.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING